MISSISSAUGA / ST.GEORGE / SCARBOROUGH

University of Toronto MAGAZINE

Autumn 2025

BIG COUNTRY. BIG IDEAS

Unapologetically bold solutions for a better Canada

INCLUDING: BUILDING HOMES FOR EVERYONE, INVESTING IN INNOVATION, ADVANCING JUSTICE FOR INDIGENOUS PEOPLES, UPDATING THE CANADA HEALTH ACT, TURNING WASTE INTO WEALTH AND MORE

CHILLING WITH THE PRESIDENT

DATE: AUGUST 20
TIME: 1:40 P.M.
CAMPUS: ST. GEORGE

On a warm, grey afternoon at the Hart House Quad, U of T President Melanie Woodin (second from right) kicked off the school year early by sharing ice cream – and conversation – with student leaders from across the three campuses.

The casual gathering brought together representatives from a range of student groups for an easygoing afternoon of community-building and frozen treats.

Woodin even stepped behind the counter to serve scoops, handing Amir Moghadam, president of the tri-campus Graduate Students' Union, a bowl of his favourite coffee ice cream. (Her own pick: coconut.)

"It's important for me to get to know student leaders, what motivates them, what they hope to accomplish this school year and how we can help," says Woodin.

Representatives from the Engineering Society, the U of T Mississauga Residence Council and the Scarborough Campus Students' Union, among others, welcomed the chance to connect with one another – and to speak directly with the president. The promise of a sweet snack was also clearly part of the draw.

"No one else said it, but I'm here for the ice cream," joked Ethan Mao, of the Engineering Society. "And it's nice to put a face to the head of the institution."

Moghadam agreed: "It's a good way to start building a relationship with the president's office." **—Mariam Matti**

PHOTOGRAPH BY POLINA TEIF

PHOTOGRAPH BY SEAN LILIANI

ROOTS OF KNOWLEDGE

DATE: JULY 30
TIME: 10:48 A.M.
CAMPUS: SCARBOROUGH

Beside Indigenous House (expected to open spring 2026), a unique outdoor space is taking shape – one designed for gathering, ceremony and learning.

At its heart lies a space to hold a sacred fire, ringed by 30 large log seats and a landscape of 150 trees, 120 shrubs and 50 perennials. The native plant species include fruit and nut-bearing trees, medicinal plants and others chosen to support endangered butterflies, moths and birds.

The Indigenous Gathering Circle was designed by landscape architects Public Work in collaboration with Nikibii Dawadinna Giigwag, a U of T-based summer employment program that connects Indigenous youth with land-based traditions and pathways into architecture design and ecological restoration. Students in the program researched plant species, advised on layout and suggested programming for the space.

High school student Jordy Bouygoran – one of 10 youth from the program who helped lead the planting ceremony – is seen at left holding a yarrow, a perennial herb.

The circle will not only serve as a place for ceremony, but also as a community hub and teaching space where visitors can engage with Indigenous knowledge and traditions. It's hoped that members of the youth program will return each summer to monitor the growth of the plants and trees – knowledge that could inform future projects.

For Liat Margolis, a professor at U of T's Daniels Faculty of Architecture, Landscape, and Design, who co-founded the program with Elder Whabagoon, the circle is about more than design. "It's not just a beautiful place to admire," she says. "It's a space where people can build a relationship with the plants and land through stewardship and knowledge sharing." **—Don Campbell**

PHOTOGRAPH BY NICK IWANYSHYN

GETTING TO KNOW YOU

DATE: SEPTEMBER 5
TIME: 5:54 P.M.
CAMPUS: MISSISSAUGA

Orientation Week is the time for trying new things, and first-year student Ayma Zahra (left) jumped right in, taking a lively ride on a mechanical bull at the Campus Carnival, the grand finale of welcome week.

The carnival capped more than 100 events held Aug. 29 to Sept. 5 to help new arrivals kick off their university journey and join a community of almost 15,000 fellow undergraduates.

Students explored the campus, taking tours of the Hazel McCallion Academic Learning Centre, the Health and Counselling Centre's Wellness Den and the Sawmill Creek nature trail, giving them a chance to discover study spots, meet peers and get a feel for campus life beyond the classroom.

Students also enjoyed social activities, such as a scavenger hunt and "speed-friending," and were entertained by a concert featuring Indigenous performers, a fashion show and the "Ultimate Taylor Swift Pool Party" at the Recreation, Athletics and Wellness Centre.

Those looking to meet faculty visited the Academic Garden Party, and the True Blue Scoops ice cream social, hosted by U of T President Melanie Woodin.

"Orientation made me feel more comfortable on campus," says first-year psychology student Carol DSouza. "Meeting other students reminded me that I'm not the only one adjusting. It was nice to start building connections." **—Kate Martin**

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BIG COUNTRY, BIG IDEAS

UNAPOLOGETICALLY BOLD SOLUTIONS FOR A BETTER CANADA

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Alum Saad Bin Zafar led Canada's cricket team to its first World Cup showing, p. 50

Prof. Afua Cooper says the more she learned, taught and wrote about Black history in Canada, the more gaps she observed, p. 38

ON THE COVER

For this issue's cover and feature photography, Toronto artist Sarah Wright crafted tiny, dreamlike Canadian landscapes. In each miniature world, she placed an oversized object representing one of the issue's "ideas," then populated the scene with "mini-Canadians" – an effect we found playful and whimsical.

PHOTOGRAPHS BY (LEFT) DUANE COLE; (ABOVE) O'SHANE HOWARD

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"What a joyful story. I was moved to tears reading of Wes Hall's triumphs and his dedication to inspiring others."

– SHARON STANBERRY, NEW YORK

A legacy to remember

Our Spring 2025 cover story featured a retrospective of Meric Gertler's tenure as U of T president, including the many new buildings and spaces launched or completed since he took office in 2013.

Meric Gertler exemplified calm, thoughtful leadership throughout his tenure. As a Pearson scholarship reviewer, I've been struck by the talent and optimism the applicants bring – and the potential impact they'll make after embracing the values and learning they gain at U of T. I noted Meric's concern about declining provincial support. At times, I wish the university were more forceful on this issue; we underestimate the strength of our voice. Still, I admire the growth and focus that Meric sustained.

RONALD SLAGHT
BA 1966 VICTORIA, LLB 1970, TORONTO

Among his many accomplishments, President Gertler has left a legacy of outstanding architecture, landscapes and environmental sustainability. The photographs and renderings of the buildings are superb!

LARRY WAYNE RICHARDS
PROFESSOR EMERITUS AND FORMER DEAN; JOHN H. DANIELS FACULTY OF ARCHITECTURE, LANDSCAPE, AND DESIGN, TORONTO

Inspired by Wes Hall

We received more than two dozen comments from readers who felt inspired by our Spring 2025 profile of Wes Hall, U of T's chancellor.

This is an amazing story of determination, discipline and going

In one word, how would you describe Canadians?

WARM AND KIND

63%

used words such as "friendly, welcoming, nice, kind, warm"

A POSITIVE VIBE

18%

used words such as "polite, chill, resilient, focused, unique"

OPEN TO EVERYONE

14%

used words such as "diverse, multicultural, open-minded"

BUT IT'S NOT ALL MAPLE SYRUP

5%

used critical words such as "phony" or "annoying"

The words U of T students chose to answer our question reveal both how Canadians see themselves and how they're seen by others. Many emphasized kindness. "People are nicer here than where I come from," says Kate Pallett, a third-year ecology student. Others, such as Harnoor Saran, a third-year student in global health and women and gender studies, pointed to resilience and optimism. "Even with the economy nowadays, we still try to work toward being better." Only a handful were critical, and one sidestepped description altogether, choosing instead a national symbol: "beavers."

This highly unscientific poll of 100 U of T students was conducted across the three campuses in February.

PHOTOGRAPH BY (TOP LEFT) WADE HUDSON; ILLUSTRATION BY DAVID SPARSHOTT

the distance. I hope that many young people, whatever their background, will read Wes Hall's story and learn from it. I find it admirable that he honours his grandmother, where honour is due.

GWENDOLYN RAMSAY
TORONTO

Wes Hall's story is so inspirational. As a Jamaican living in Toronto I'm proud of his achievements. I love how he uses his position to empower many along the way.

VIVEEN BROWN
TORONTO

Who should be eligible for MAiD?

Our Spring 2025 digital issue included opposing opinions about whether Medical Assistance in Dying should be extended to those suffering solely from mental illness.

What often gets lost in these debates are the voices of the people who would actually be requesting MAiD. I'm someone who has lived for years with severe, treatment-resistant mental illness. I've tried countless medications, hospitalizations and therapies (including IV ketamine infusion therapy, repetitive transcranial magnetic stimulation and electroconvulsive therapy) – and still I wake up every day to unbearable suffering.

This isn't about a temporary crisis or avoiding discomfort. It's about enduring constant torment with no meaningful relief and no realistic prospect of recovery. Forcing people like me to keep going "just in case" another treatment works feels cruel. It ignores the reality that we've already tried, for years, to get better.

MAiD for mental illness isn't about giving up too soon. It's about acknowledging that psychiatric pain can be just as unrelenting, disabling and intolerable as physical illness – and that people living it deserve the same dignity and autonomy in deciding when enough is enough.

NAME WITHHELD BY REQUEST
THORNHILL, ONTARIO

I fully respect the need to protect vulnerable individuals and groups. But I hope MAiD will be expanded to allow advance requests under certain conditions. I would like to face my future knowing that I can plan my own death – if, for example, I suffer a stroke, lose cognitive ability, can no longer live independently or am advised to enter long-term care. I'd like my autonomy respected so that, under conditions I set, MAiD could be administered.

MAURENE McQUESTION
MSc 2006, TORONTO

Thank you for drawing attention to vulnerable and impoverished people in relation to Track 2 of MAiD. We can do better than simply respond to suicidal despair. We must provide dignity and address the real needs that drive it. Our children are watching to see if we uphold these values.

LORNA DUECK
BURLINGTON, ONTARIO

Write to us

University of Toronto Magazine welcomes comments at uoft.magazine@utoronto.ca. All comments may be edited for clarity, civility and length.

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DEFY GRAVITY

ILLUSTRATION BY STUDIO WYSE; RENDERING (ST. GEORGE) COURTESY OF DILLER SCOFIDIO + RENFRO, DESIGN ARCHITECT / ARCHITECTS–ALLIANCE, ARCHITECT OF RECORD

U OF T SCARBOROUGH

BUILDING BOOM

UTSC is undergoing a significant expansion, with three new buildings set to open on the north part of campus over the next year.

Indigenous House, slated to open spring 2027, offers dedicated space for learning about Indigenous culture, history and knowledge. Its architecture draws inspiration from a winter wigwam, and the adjacent Indigenous Gathering Circle features a fire pit, log benches and native plants.

Set to open in fall 2026, the Myron and Berna Garron Health Sciences Complex will house the Scarborough Academy of Medicine and Integrated Health. Once operational, the academy will train 160 medical students and 252 other health professionals, including physician assistants, physical therapists and nurse practitioners. It will also serve as a hub at UTSC for health sciences undergraduates.

Also launching in 2026 is the Retail and Parking Commons. Located next to the health sciences complex, the facility will include a relocated campus bookstore, 1,092 new parking spaces and offices for parking services.

ST. GEORGE

A LANDMARK IN THE MAKING

U of T is moving forward with a redesigned plan for a new building at 90 Queen's Park Cres. – a major gateway to the St. George campus and a future hub for community engagement.

The updated design will now rise six storeys instead of eight and will house U of T's School of Cities and the faculties of Arts and Science, Law and Music, along with a state-of-the-art recital hall.

One of the most notable design changes: more of Falconer Hall's historic west wing will be preserved.

Located beside Falconer Hall, the site includes the former McLaughlin Planetarium, which closed 30 years ago and was later acquired by the university. The project, first unveiled in 2019, has evolved through extensive consultation with the city and the local community. The latest version is designed by Diller Scofidio + Renfro in partnership with architects–Alliance.

The new building will also feature public spaces, including a café and accessible pedestrian pathways linking Falconer Hall with the nearby Edward Johnson Building, home to the Faculty of Music.

U OF T MISSISSAUGA

VIRTUALLY YOURS

Prospective students from around the globe – or faculty, staff and librarians considering working at UTM – can now visit the university's western campus without leaving home.

Launched earlier this year, three virtual tours feature 52 immersive stops, including science labs, theatres, the Instructional Centre's rooftop apiary, the Recreation, Athletics and Wellness Centre, and the library in the Hazel McCallion Academic Learning Centre.

The interactive tours include English-language audio guides and use 360-degree panoramic images, enabling users to look in all directions and zoom in on details.

Users can follow links from the virtual tours to apply to UTM, to read the digital viewbook or to schedule an in-person visit, says Michael Gomez, manager, student recruitment communications, who helped oversee the project.

Future stops will include the UTM farm, the Tipi and teaching lodge, greenhouses and student residences.

MEETING THE MOMENT

It was just over 34 years ago that I first walked through the doors of Convocation Hall, as an undergraduate, here for my first university lecture. I'd come to U of T because I wanted to be a scientist. My interest had been sparked by my mother's love of the natural world, and the many happy times our family spent together on Georgian Bay.

I didn't really understand what being a scientist was about. My impressions came from movies and science fairs – eccentric personalities mixing colourful solutions. But that day in 1991 I had my first glimpse into the amazing world of science.

The great Spencer Barrett was our professor. He explained that tropical ecosystems contain a store of unexploited chemical compounds, and that researchers were testing some as possible treatments for cancer. The part that really struck me was that those researchers were from U of T – *my* university.

That's when I began to understand the power of a research-intensive institution like ours. It's an experience that unfolds across our three campuses every day, as U of T professors transform how our students understand and engage with the world.

The University of Toronto is a place where great minds have the freedom to go where curiosity leads. It's a place where we can think, freely, together – about what it means to be human, to live in society, and about the wonders nature has to reveal. It's also a place where we can talk, openly and respectfully, about how to build a better world.

That conversation is especially urgent because, at this time in history, we need to build a better world. We are witnessing a dangerous erosion of the rules-based international order, growing inequality and polarization, and daily reminders of the fragility of democracy.

Universities are no longer fully trusted as authoritative sources of knowledge. Scholars face new threats to academic freedom, including censorship and intimidation. Scholarly expertise – and even the idea that public debate must rest on facts and reason – is viewed with increasing suspicion.

While Canada is not immune from these trends, our commitment to liberal democracy remains strong. This springs from our tradition of dialogue over discord, inclusion over isolation, and evidence over ideology.

People everywhere are looking to our country to be a beacon of light in this time of gathering darkness – because Canada has something essential to offer the world. And so, as Canada's flagship university, we must rise to meet this moment.

In just over a year, we will celebrate U of T's bicentennial. As we reflect on our first two centuries and look ahead to our third, we can help chart a brighter future. We started small in 1827. But by the beginning of our second century, we had made our debut on the world stage – alongside our partners at Toronto General Hospital – with the Nobel Prize-winning discovery of insulin.

In successive eras of epic loss and change – two world wars, a depression and a nuclear arms race – the U of T community rallied to protect society, defend democracy and keep the peace. We welcomed generations of newcomers, helping to shape Canada's modern, multicultural identity. We expanded east and west, and U of T Scarborough and U of T Mississauga flourished as distinctive and innovative communities.

Our students and faculty became prominent in every field. Our alumni emerged as leaders in virtually every country. As a result, U of T's impact is all around us – from electron microscopy to the evidence for black holes, from the discovery of stem cells to labs-on-a-chip,

PHOTOGRAPHS BY JOHNNY GUATTO

from late-night sketch comedy to great works of modern literature.

Then we made a breakthrough of singular importance as we, along with the rest of Canadian society, began to reckon with our treatment of the Indigenous peoples of this land. The University of Toronto has made a solemn commitment to address that terrible legacy. We are taking action across our teaching, research and community activities. We have a great deal more to do as we continue answering the call of truth and reconciliation, but change for the better is happening – a powerful source of hope in our capacity to learn, change and grow together.

These are just a few milestones from U of T's first 200 years. Reflecting on them, a key question comes to mind: at the turning points in our history, how did we rise to meet the moment? The answer came to me during the chapter we wrote together just a few years ago.

In many ways, the COVID-19 pandemic was unprecedented. But in one crucial way it followed a familiar pattern. In the face of a complex, urgent problem, the U of T community stepped up with our breadth of talent and depth of expertise. Driven by resilience, creativity and dedication to the greater good, we played an outsized role in addressing one of the most formidable challenges of our time.

Here's another daunting challenge that we're addressing with everything we've got. Under Meric Gertler's leadership, we transformed our three campuses into a "living lab" in response to the climate emergency. He inspired us to create a plan and commit to going beyond net-zero, to become climate positive by 2050 – or even earlier. The result: we're showing the world that a sustainable future is possible – and that U of T truly defies gravity.

Another example: In 1998, under Rob Prichard's leadership, we enshrined a landmark policy that no domestic student offered admission to U of T should be unable to enter or complete their program for financial reasons. This defining act still distinguishes us from our global peers and remains a cornerstone of our commitment to inclusive excellence.

How will U of T help Canada to meet this moment — a time of profound social, economic and geopolitical disruption?

In every generation since our founding, the U of T community has rallied to meet the moment. But what will that mean for this generation? How will the University of Toronto help Canada to meet *this* moment – a time of profound social, economic and geopolitical disruption?

In the face of many challenges, Canadians are responding with a renewed sense of national purpose and determination to defend our sovereignty.

As a partner in that effort, U of T will be an indispensable source of resilience and strength. Our faculty and students are part of a vast ecosystem of innovation and entrepreneurship. Our graduates form a critical mass of top talent in every sector. And the U of T community is an enduring source of creativity that can help propel the world toward greater long-term prosperity.

U of T can also play a key role in tackling global health challenges. We bring a rare combination of multidisciplinary expertise and a culture of collaboration across the health sciences, public health, engineering, economics and beyond.

Our faculty and students are doing promising work at the intersection of genetics, regenerative medicine and artificial intelligence. They're leading the way toward a cure for diabetes, rapid-response vaccine platforms, and treatments for degenerative diseases. Together, the U of T community can help save and improve countless lives at home and abroad.

Another area in which U of T can lead is in restoring the culture of civil discourse. With humility, courage and goodwill, we can help heal society's divisions and help Canada project its voice in defence of pluralism and democracy. Fostering open, reasoned and respectful dialogue isn't just something we can do – it goes to the heart of our mission and our responsibility as an academic institution.

Our world faces big problems, but U of T can make a big difference. Together, we'll envision how we can write the next chapters in U of T's history – how we can define what it means to be this great, good place in the generations to come.

Let us draw inspiration from our past – our record of achievement, and, even more, our history of learning and growth. As we look to our future, let our ambitions match our talents and our hopes to rise to our highest ideals. Let us resolve that our ultimate priority will be this: to *meet the moment*, whatever it requires, for the communities around us, for Canadians and for all humanity.

MELANIE WOODIN

Condensed from the president's installation speech, Oct. 17, 2025.

Time to shine.

Hart House Theatre festival season gives U of T students a chance to shine on stage, whether it's through the annual Dance Festival, Music Festival or Drama Festival. But it's not just about performing—these student-run events foster collaboration, boost confidence and give participants important transferable skills they can use once they head out into the world and start their careers. When you purchase U of T affinity products from our insurance partners, a portion of the proceeds goes to Hart House Theatre festivals and other initiatives that celebrate and empower our students and alumni.

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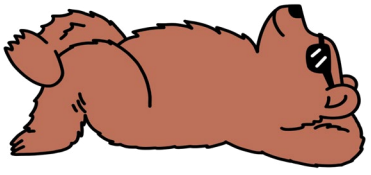
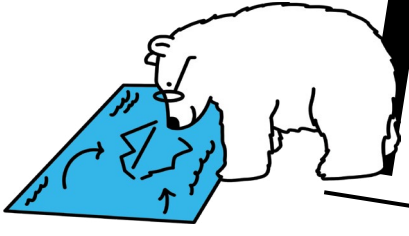


SIX IDEAS FOR A STRONGER, FAIRER AND MORE SECURE CANADA

BIG COUNTRY, BIG IDEAS



Canada stands at a crossroads. In this issue, U of T experts explore solutions to strengthen health care, protect the North, and expand our global impact. They show how sustainable technology, fair housing, and justice for Indigenous Peoples can shape a stronger, more resilient country — and chart the path forward for all Canadians.

UPDATE THE CANADA HEALTH ACT

After four decades, the landmark law still protects universal care – but U of T experts argue it must evolve to face modern pressures

(PHOTO RETOUCHER) DANIEL HEARN; (LIGHTING) RO AGALAWATTE

by
Ishani Nath

They arrived before the sun. On a snowy January morning in Walkerton, Ontario, hundreds of people began 2025 by lining up, bundled in scarves and winter coats, hoping to score the hottest ticket in town: the chance to register with a family doctor.

The crowd represented only a fraction of the more than six million Canadians who currently lack a family physician, and their presence was a stark reminder that, despite its reputation, the country's universal health-care system has gaps big enough for millions to slip through.

For many Canadians, universal health care is a point of pride. The Canada Health Act, passed by Parliament in 1984, is the legislative backbone of this system. It ensures that most residents can see a doctor or visit a hospital without worrying about the bill. Yet in the more than 40 years since its passage, the act has never been substantially updated.

Now, with the health system strained by long wait times, a critical shortage of family doctors and rising rates of mental illness and addiction, some health experts argue the time has come for a Canada Health Act 2.0.

"We need to fundamentally alter our thinking because not all Canadians have access to the medically necessary care they need," says Gregory Marchildon, a professor emeritus at the Institute of Health Policy, Management and Evaluation at the Dalla Lana School of Public Health and one of the country's leading voices on health policy. He wants us to rethink what it means to have "reasonable access to health services" and to redefine which health professionals can provide care.

ONE STANDARD FOR ALL

The Canada Health Act was designed to ensure that no matter where in the country someone lives they receive the same standard of health care without having to pay out of pocket. This ethos

is opposite to what airlines use, says Marchildon: "There's no business class, there's no economy class, there's just one class."

The legislation, only 13 pages long, sets out criteria for what services must be publicly covered. Provinces and territories then receive federal funding via the Canada Health Transfer, based on how they meet those criteria. Marchildon, who has written extensively about the introduction of Medicare in Canada, compares the act to a house: it provides the basic layout, and the furniture and appliances required, but leaves the provinces and territories free to add extras. He says the act was initially effective in making health care more accessible for those who previously couldn't afford it.

Back then, however, the focus was on medically necessary hospital and physician care. Services from nurse practitioners, addictions specialists, physiotherapists and occupational therapists were not included under the act. Neither were First Nations' traditional healing and treatments. Some provinces and territories have since passed legislation to cover these services, but access depends on where a person lives – and their ability to pay. Ontario, for example, saw several private nurse practitioner-led clinics pop up last year, with fees ranging from $70 a visit to more than $400 for a yearly membership.

"IT'S ALL ABOUT STRENGTHENING THE SYSTEM WE HAVE AND BUILDING ON OUR SUCCESS."

–GREGORY MARCHILDON

The Canada Health Act passed the House of Commons in April 1984 with all-party support – a rare unanimous vote (264–0) – and received Senate approval just weeks later.

Provinces risk losing a portion of their Canada Health Transfer, today worth more than $50 billion a year, if they breach the act's principles.

Having moved to a new city, Marchildon himself is among those without a doctor. The last time he was sick, he simply didn't receive care. "But we can't just keep adding more doctors," he says. "That doesn't do the trick.

"Good primary health care requires the contributions of many others. Nurse practitioners, for example, can more easily provide services to people living in areas chronically underserved by traditional family physicians."

MODERN PRESSURES

The cracks in the system show up in many ways. In addition to the difficulty of finding a family doctor, many Canadians report exceedingly long wait times or barriers to care – delays that have been intensified by backlogs from the pandemic. In 2024, at least one in four people waiting for a hip or knee replacement didn't get surgery within the recommended six-month window. More than half of young adults with early signs of mental health issues said cost kept them from seeking care. And one in 20 Canadians took measures such as skipping doses or delaying refills because of the out-of-pocket expense of prescription medication. The house, as Marchildon described, needs renovations.

"The act was groundbreaking in its time, but the care we need now goes far beyond hospitals and doctors," says Sara Allin, an associate professor at the Dalla Lana School of Public Health and co-editor of the journal *Healthcare Papers*, which devoted a recent issue to reimagining the Canada Health Act.

Allin explains that changing the act is "the only real tool the federal government has to influence and shape the way the health system is organized."

Marchildon agrees, noting that the current definition of "reasonable access" focuses almost entirely on eliminating user fees. "If access in the Canada Health Act was defined to include *timely* access, then provinces and territories would strive to reduce the most unacceptably long waiting times and barriers, since none would want to lose part of their cash under the Canada Health Transfer," or, more significantly, he adds, "the bad publicity that comes with being in breach of the Canada Health Act."

WHAT REFORM COULD LOOK LIKE

Revising the act could mean expanding insured services to include a broader range of health professionals – from nurse practitioners and midwives to addiction specialists – no matter where you live.

Marchildon argues that it could also mean building in greater accountability and transparency measures. In 2024, for example, the Canadian Medical Association called for a Chief Health Accountability Officer to monitor how the provinces and territories are meeting their obligations under the act – and to publicly report outcomes. "So much of our taxes go toward this transfer," says Allin. "Updating the act could help ensure we get more out of that investment."

Critics will raise concerns about the cost associated with adding more services to an already pricey publicly funded bill. But supporters counter that many changes could be achieved through more efficient organization, not just more spending. Nurse practitioners and physician assistants can often provide high-quality primary care less expensively than physicians, while expanded roles for pharmacists or midwives could also achieve

savings and relieve some of the workload falling solely to family doctors.

THE POLITICS OF CHANGE

Revising such an iconic piece of legislation, let alone one that hasn't been significantly updated in 40-plus years, is not simple. In that time, governments have sidestepped the issue by creating parallel legislation or "letters of interpretation" that adjust definitions without changing the act.

Last January, then federal Health Minister Mark Holland released an interpretation letter (effective next spring) to add health professionals including nurse practitioners, pharmacists and midwives to the list of "insured services" providers. Marchildon says steps like this are helpful but warns that these changes can be easily reversed as politics or parties change.

"One of the protections of the Canada Health Act is that it's of such great importance to Canadians that it is very difficult, for good reason, for the government to make major changes," says Marchildon.

Building consensus for change among provinces, territories, political parties, various stakeholders and the public will be a daunting task.

But Allin and Marchildon argue that the moment may be right. After four decades, Canadians have a clearer sense of the system's strengths and weaknesses. And the pandemic underscored both the value of universal health care and the urgent need for modernization. The act has ensured generations of Canadians access to care without paying out of pocket. The question now is how to protect that principle while adapting to 21st-century realities.

"Yes, there are challenges – but we've built something worth protecting, and we can make it better, from the bottom up with improvements to service delivery at a local level facilitated by provincial reforms, and from the top down through improvements to the Canada Health Act, initiated by the federal government," says Marchildon.

"It's all about strengthening the system we have and building on our success."

INVEST IN INNOVATION

U of T experts argue that the country's economic future depends on turning ideas and resources into high-value industries

by
John Lorinc

In a chaotic moment when decades-old alliances and trade relationships have been upended seemingly overnight, Canadian leaders face a generational question: how can our country earn influence in a rapidly changing world order?

Great power rivalries are eclipsing previously stable global norms, leaving middle powers such as Canada to reassess their roles. "If you had asked me five or six years ago, I would have said the country that controls the process of globalization through institutions is the great power," observes Manjari Chatterjee Miller, an international relations professor at the Munk School of Global Affairs and Public Policy. "That was the United States. Today, the international order built by the U.S. is in flux."

Canada's response, experts argue, should focus on an ambitious domestic agenda to boost productivity through innovation and harness its natural resources in new ways. This means developing new technologies to refine raw materials domestically and exploring new markets outside North America. Yet Janice Stein, founding director of the Munk School and the Belzberg Professor of Conflict Management, cautions against expecting sweeping changes overnight. "If we're able to reduce the share of our exports going to the U.S. from 75 per cent to 65 per cent, that would be an achievement," she says. "These next 10 or 15 years truly have to be about investing energy and effort in our own society, and preparing for a very different global economy."

A *Financial Times* column published earlier this year points to Canada's potential role as an energy and critical-minerals superpower. Endowed with abundant natural resources, Canada possesses oil, uranium and potash, and increasingly crucial substances such as lithium, rare-earth elements and graphite. These materials are essential for the global transition away from carbon. "A country with [Canada's] geography could clearly generate higher output," wrote economist Tej Parikh. "To do so, the Canadian economy needs to become more efficient, raise investment and attract more high-skilled workers."

But Canada's future prosperity cannot rely solely on commodities. Dan Breznitz, a professor of political science and the Chair of Innovation Studies at the Munk School, says governments and businesses must focus on developing and exploiting home-grown intellectual property in ways that have previously eluded policymakers.

"Both the private and public sectors in Canada avoid engaging with new knowledge and new technology," he says. "The result is falling productivity. We have the most highly educated workforce in the world, yet they work with old technology, old equipment and the old way of doing things."

BOUNDLESS POTENTIAL

He draws a cautionary parallel with Argentina, a resource-rich nation whose recurring economic crises stem from an open-markets policy and the foreign acquisition of domestic resources. In Canada, long-stalled median wages and low productivity rates reflect long-standing assumptions that natural resources will be processed abroad, that intellectual property will be acquired by offshore investors, and that Canadian firms looking to commercialize inventions must head south for venture capital. An alternative future, Breznitz argues, requires a strategic approach that uses Canada's deep talent pool and vast resources to become a global player in selected sectors.

Our reserves of rare earth elements are estimated at 15 million tonnes, but we depend on imports from China for usable, separated rare earth products.

Stein points to the case of rare earth elements and critical minerals. While Canada holds some of the world's largest reserves, the processing of these minerals is overwhelmingly concentrated in China. Sustained investment by China, as well as lax environmental standards, have given that country enormous clout in global supply chains, including over the U.S., for electronics and other high-tech products. "We need a grown-up discussion," Stein says. "Do we want strategic leverage in that market? What costs are we willing to pay? What investments are we willing to make?"

Canada holds approximately 10 per cent of the world's proven oil reserves, 30 per cent of the world's potash (the largest share), and about 10 per cent of the world's uranium reserves.

Breznitz argues that policy should aim to jumpstart domestic innovation by commercializing Canada's world-leading research. The Canadian government, he says, must encourage long-term experiments in strategic sectors, including banking, telecommunications, health, quantum computing and new materials. Policy interventions might include reducing market concentration in finance and telecom, attaching conditions to R&D tax incentives to prevent the loss of valuable intellectual property to foreign investors, and giving innovators incentives to test, scale,

"WE HAVE THE MOST HIGHLY EDUCATED WORKFORCE IN THE WORLD, YET THEY WORK WITH OLD TECHNOLOGY, OLD EQUIPMENT AND THE OLD WAY OF DOING THINGS." —DAN BREZNITZ

and also abandon floundering projects quickly. He cites examples such as AI large language models and semaglutide (the drug used to treat diabetes and facilitate weight loss, and sold under various brand names, including Ozempic). Semaglutide originated in no small part from research by Daniel Drucker, a U of T professor in the department of medicine working at Mount Sinai Hospital, but was commercialized by the Danish pharmaceutical company Novo Nordisk.

The driving principle, Breznitz adds, is maximizing high-value-added exports. This includes developing and commercializing clean mining technologies to process the minerals that will power a low-carbon society. "That's how you grow our economy."

WATERSHED MOMENT

Miller notes that the abrupt shift in Canada's political relationship with the U.S. represents an inflection point that is pushing governments and businesses to revisit long-standing assumptions about our place in the world. Canada, she observes, has always existed under a "great power umbrella" – first the British empire, then the post-war U.S.-led order.

If this umbrella is gone, then Canada has some thinking to do. Our new and uncomfortable insecurity – of no longer being able to depend on a unique continental alliance – should provide not just a slogan ("elbows up"). It should fuel the political will to allow Canada to overcome the economic complacency that characterized the NAFTA era.

Canada can aim to become a mid-sized strategic power, like South Korea, with its high-tech manufacturing, or Switzerland, with its pharmaceutical industry, says Breznitz. "We don't need to control everything. We can serve as an example of a rule-abiding, strategically open, and welcoming economy that the rest of the world aspires to. But for that," he stresses, "we need to be ambitious."

A decade after the Truth and Reconciliation Commission's Calls to Action, U of T experts weigh the gains, the gaps and the next steps

ADVANCE JUSTICE FOR INDIGENOUS PEOPLES

Canada has taken steps toward reconciliation with Indigenous Peoples, but justice remains unfinished work. Here, Indigenous legal scholars John Borrows and Douglas Sanderson, and political scientist Sheryl Lightfoot speak with *University of Toronto Magazine* editor Scott Anderson about what's been achieved, where the country is falling short and how to bring about lasting change.

Where have you seen the most encouraging progress since the Truth and Reconciliation Commission issued its Calls to Action – and where is Canada still lagging?

Douglas: The most meaningful change is widespread recognition that Aboriginal Peoples exist and have a history – and that many details of that history are unjust. I don't think there is general agreement on anything else except that residential schools were bad.

John: It was important that the Truth and Reconciliation Commission directed its Calls to Action not just to governments, but to the public, to universities, health-care organizations, arts groups, social workers – everyone.

Sheryl: One of the most remarkable innovations was calling on all levels of government – federal, territorial, provincial and even municipal – to adopt the United Nations Declaration on the Rights of Indigenous Peoples. This call for deep structural change opened the

possibility for governments to act, and we can acknowledge some progress. But one shortcoming is the lack of independent monitoring.

Douglas: Land acknowledgments in public schools may prove to be the most consequential. These are helping to shape a generation of children who understand that we are all living on Aboriginal lands, and that wrongs were done. When this generation is in charge of business and politics, things might become possible that are inconceivable to us now. We're not done with truth, though; there's much more to tell.

How do you distinguish reconciliation from justice?

Douglas: Justice provides a framework for identifying wrongs and making them right. People can struggle with reconciliation because they treat it as a thing to do rather than an end to achieve.

John: Justice is perspectival. You can't have only a top-down understanding of what's required to create meaningful and fair change. Indigenous people's voices, in particular, have been left out. Their own laws have been left out of defining what justice means. To create a more just society is to involve Indigenous people's own perspectives, legal traditions, standards, principles, criteria and authority.

Sheryl: As a country, we've taken baby steps toward accepting Indigenous legal orders alongside Canadian institutions. We're seeing innovations in British Columbia that will force us to rethink how we understand jurisdiction, title, property – and that could be revolutionary in some respects. But we are a long way from that nationally.

The "land back" movement – an Indigenous-led effort to reclaim stewardship of traditional lands – is often misunderstood. How would you explain what it really means?

Douglas: Land back is about governance, lawmaking and jurisdiction. Land itself is a small part of the equation. When non-Aboriginal citizens hear "land back," I think what they hear is, "Get off my land," and this contributes to the problems we are facing. We have to be able to talk about these issues with our settler neighbours in a way that is not frightening to them. So, I don't like the phrase "land back."

John: I don't like it either.

Sheryl: I'm not a fan myself.

Douglas: Because the land isn't actually what we're after. It's decision-making authority. That conversation, I think, is less frightening to people. It's incumbent upon us as scholars to start talking about this in different ways. And while courts can decide particular issues between particular parties, the question of justice and how we're all going to live together side by side is one that we need to decide for ourselves.

John: Even when a decision comes down from the court, most of the work needs to be done by citizens.

Sheryl: There have been experiments in New Zealand for a generation and a half concerning land back, co-governance and co-jurisdiction. There's usually an apology, a redress package and a conversation about what parcels of Crown land can be returned.

Douglas Sanderson is a professor and the Prichard Wilson Chair in Law and Public Policy at U of T's Henry N.R. Jackman Faculty of Law and the faculty's decanal advisor on Indigenous issues. →

↓ John Borrows is a professor and the Loveland Chair in Indigenous Law at U of T's Henry N.R. Jackman Faculty of Law.

PHOTOGRAPHS BY MAY TRUONG

Sometimes the claimant group wants the land for commercial purposes or economic development; other times they want to return it to its natural state. In those cases, co-governance is often set up between the Māori group and the municipal government so decision-making becomes collaborative. As we consider land back, it's vital to stay open-minded about arrangements that honour everyone's duties to the land.

Since none of you like the slogan "land back," how might you rename it?

Douglas: I've seen "jurisdiction back" stickers, which is more apt but not good.

John: I like the seven grandmother-grandfather teachings amongst the Anishinaabe: "love, humility, respect, courage, truth, wisdom, honesty."

Douglas: Principles to govern a relationship.

John: That's right. It's not catchy, like "land back." But those are the ways you live productively and helpfully.

Sheryl: For me, land back reflects a certain style of two-dimensional, colonial thinking – yours or mine, zero sum. What we're saying is relationships are far more than two-dimensional. It's about living with the land, living with the other people on the land, living with the non-human creatures of the land. And this invites a much more complex way of relating to and understanding one another that cannot be easily sloganized.

Looking ahead, what guides your work for justice?

Douglas: People want change to happen fast. So, I'm concerned that they will throw up their hands if they don't see progress. Aboriginal peoples are not going to give up their desire for massive structural change, but my settler neighbours might not see significant change and get bored of trying – especially when they're not even sure what it is they're supposed to be doing. I remind them that everything we do today has the potential to radically change the future. It took a long time to get into this mess and it will take a long time to get out. But it needs constant maintenance, care, love, honesty, truth.

Sheryl: Institutions don't change quickly by design. And progress is never linear. There will always be push-backs. We have to stay nimble and flexible, and when we hit resistance, highlight it, counter it and find other paths forward – because they're always out there.

"LAND BACK IS ABOUT GOVERNANCE, LAWMAKING AND JURISDICTION. LAND ITSELF IS A SMALL PART OF THE EQUATION"

—DOUGLAS SANDERSON

Ten years from now, what do you hope Canada will have achieved?

John: I hope we recognize that there are many differences of opinion *within* Indigenous communities, families, societies – and that this is something to be celebrated. We have majority opinions and dissenting opinions in the courts. We have majority and minority parties in our parliaments and legislatures. If I'm dreaming, I would like to see that there are different ways to be Anishinaabe, Blackfoot or Salish. These different "ways of being" help us become a more dynamic society, and enable us to deal with dissent and difference. Often these are squelched in the service of trying to present a unified vision to the world or by people's stereotypes of Indigenous peoples.

Douglas: My 10-year ambition for the law school is quite modest. I would like to see non-Aboriginal people teaching Aboriginal law classes, and I would like to see more Aboriginal people hired into tenure track positions teaching anything but Aboriginal law – because they are excellent scholars, not drawing on their identity as Aboriginal persons. That would say to me that we are making real progress.

Sheryl: Ten years from now, on September 30, the National Day for Truth and Reconciliation, I would like us all to have the day off. Non-Indigenous people will be doing presentations for free on that day and taking time to reflect and do the deep work.

← Sheryl Lightfoot is a professor of political science in the department of political science and the Munk School of Global Affairs and Public Policy.

This conversation has been condensed for clarity and flow. A longer version appears at magazine.utoronto.ca.

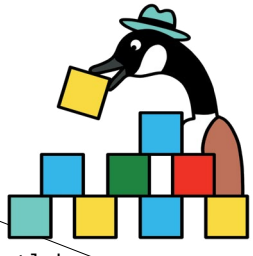
Canada's housing crisis is squeezing families at every income level, but U of T experts say solutions are within reach.

BUILD HOMES FOR EVERYONE

(PHOTO RETOUCHER) DANIEL HEARN; (LIGHTING) RO AGALAWATTE

This past spring, Ben Rayner, a former *Toronto Star* reporter and music critic, found himself homeless. A combination of depression, separation from his partner and prioritizing time with his young daughter had lowered his income. Then, a sudden $650-a-month rent increase dealt the final blow. Rayner was formally evicted and began couch-surfing. At his hearing before the Landlord and Tenant Board, he was told that it's not a landlord's job to be moral.

Rayner's story is a stark illustration of how acute Canada's housing crisis has become. At the top, housing has partly become an investment, making it harder for younger professionals to buy homes. At the same time, middle-and lower-income people struggle to find affordable rent, and those at the lowest end are being pushed out of housing altogether. While home ownership may seem disconnected from street homelessness, Alison Smith, an associate professor of political science at U of T Mississauga, says all levels of housing are interconnected: "It's a system."



by Alison Motluk

Addressing this long-running crisis requires bold action. One place to start, says Carolyn Whitzman, a senior housing researcher and adjunct professor at U of T's School of Cities, is a substantial public investment in non-market housing. She believes Canada should ensure that 20 per cent of the national housing stock falls into this category – roughly matching the share of Canadians who cannot realistically be served by market housing.

Such a target would bring Canada more in line with its international peers who have successfully addressed housing shortages and homelessness. In France, for example, in 2000, the national government set a mandate that 20 per cent of housing in most urban municipalities be non-market by 2020 – and in 2013 raised the target to 25 per cent by this year. The plan was supported through measures such as land purchases, savings bonds and payroll taxes. "So, it can happen," says Whitzman. "It *has* happened."

In Canada, by contrast, about 3.5 per cent of housing is non-market. Achieving 20 per cent would require a huge push from both governments and non-profits.

Whitzman traces the problem back decades. In the 1990s, the federal government passed responsibility for housing to provinces and territories. But most jurisdictions built little or nothing. A prevailing view at the time was that the market would solve our housing woes. It didn't. Investors were not interested in building low-rent homes, and the proportion of non-market housing declined, pricing many out of a place to live. "We need to accept that low-income people will never be served by the market," says Whitzman.

In her recent book, *Home Truths: Fixing Canada's Housing Crisis*, she argues that affordable housing should be regarded as critical infrastructure, no less vital than hospitals, schools, libraries, sewers and bridges. When we invest in housing, the focus should not be only on financial returns, but also on how much *society* can be improved. She notes that non-market housing can reduce substance abuse and violence, lower demand for child

A 40-unit tiny home community in Duncan, B.C., was built for less than $1 million and provides residents with beds, meals and around-the-clock supports.

Following the setup of the community, crime in the area dropped 18 per cent, emergency medical calls decreased and there have been no fires or floods.

protection and emergency health care, and keep people out of the justice system. In short, affordable housing supports community health.

Canada already has good precedents. Whitzman points to the St Lawrence neighbourhood in downtown Toronto, an innovative, high-density, socially mixed community of more than 4,300 homes built beginning in the 1970s. About one-third of the units are market-rate, while two-thirds are co-ops and public housing. A three-bedroom apartment still rents for as little as $1,800 a month. "That is the difference that non-market makes," says Whitzman. "It maintains affordability in a way that market housing simply doesn't." She calls non-market housing "perpetually affordable."

Edmonton provides another model. City leaders there adopted the principle that everyone deserves a home and set a target of 16 per cent non-market housing in every neighbourhood. Revised zoning allows three-storey buildings almost anywhere, and laneway and garden suites can be severed into separate properties. "Edmonton is a poster child for zoning reform," says Whitzman.

Even Toronto, one of Canada's densest cities, needs to allow greater intensification, Whitzman says. "Up to four storeys should be permitted in every residential area, without limits on the number of units. We need apartment buildings, we need a new generation of rooming houses, and we need seniors' housing. We need everything." The most important step municipal governments can take, Whitzman adds, is to create an enabling environment for small-scale intensification: "Legalize the housing that's most needed."

ENSURING INCLUSION

We also need to keep an eye on affordability, she says – and by affordable, she means housing within reach of people who earn less than half of the median income. A decade ago, the federal government announced it was getting back into the business of building housing and pledged to assist with financing, land procurement and construction. But Whitzman points out that $55 billion of the $88 billion earmarked under the National Housing Strategy between 2018 and 2028 has gone toward an apartment construction loan program where only three per cent of the units are affordable to those most in need. "They forgot to look at what affordable means," she says.

In September, the federal government unveiled Build Canada Homes, a new agency to accelerate affordable housing construction. Whitzman calls it a welcome "restart," noting that the approach is right but that the program needs to be expanded to meet demand.

While long-term structural change is critical, Alison Smith says urgent solutions are also needed for those experiencing homelessness right now. She believes that quick-to-construct, low-cost, and well-designed and maintained tiny homes, supported by social services, offer an immediate, innovative solution that more small municipalities and suburbs should consider.

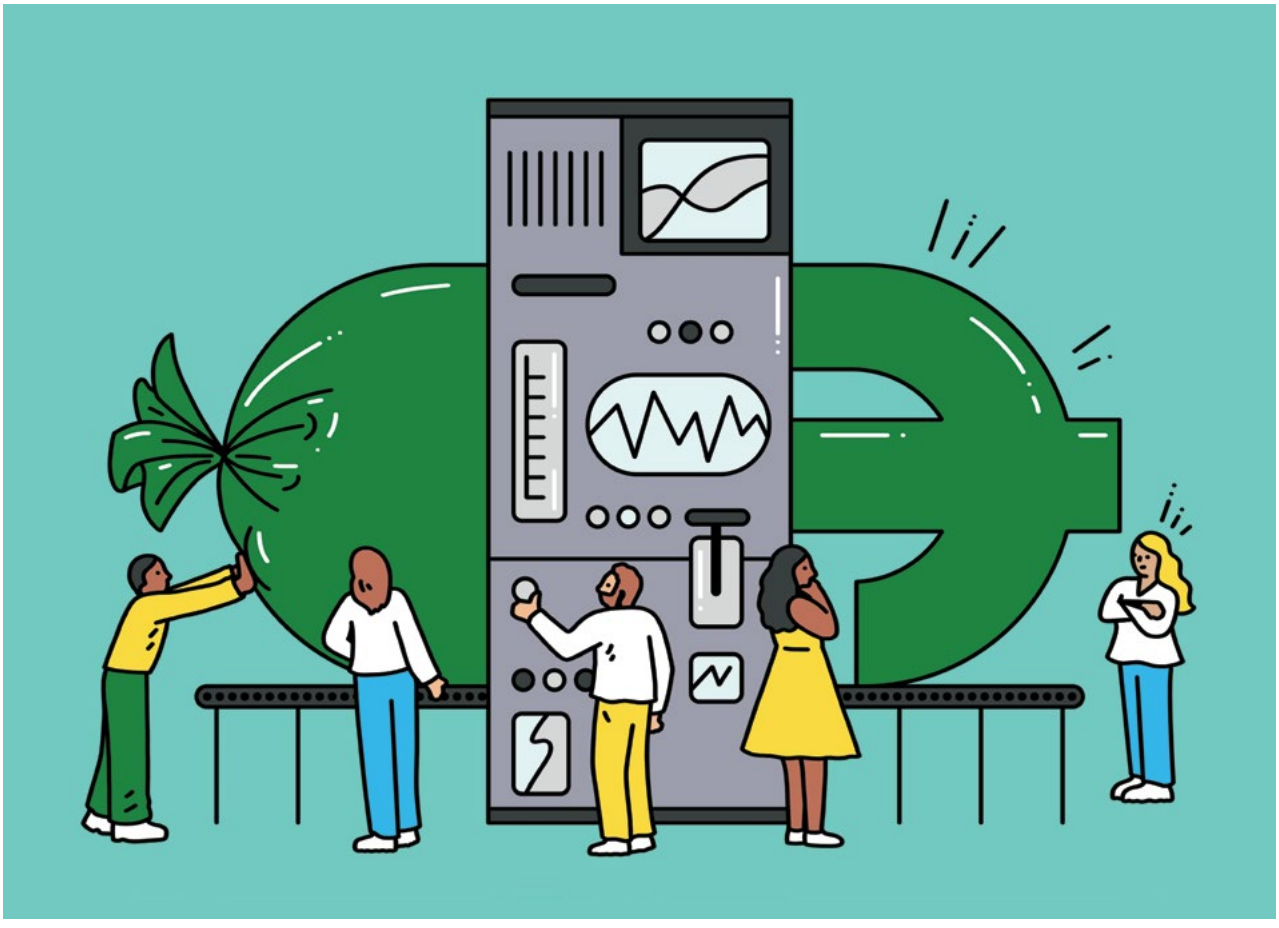
She has studied "The Village," a community in Duncan, B.C., where one-person sleeping cabins are arranged in three circles, with a communal space including washrooms at the centre. Many residents had previously spent years living on the street. Some didn't feel safe in shelters and existing supportive housing was full. Smith says the tiny home community "filled a pretty big gap."

Each unit contains just a bed, a desk and a dresser. All meals are brought to the site, and other supports, such as mental and physical health care, addiction services, skills training and referrals to specialty organizations, are provided for residents, some of them around the clock. The entire project – 40 sleeping cabins and one staffroom cabin, plus two washrooms – cost just under $1 million to set up. Community opposition was strong at first. But organizers held public meetings to address concerns, and resistance gave way to support. Smith notes that crime in the area has dropped 18 per cent, emergency medical calls have decreased and there have been no fires or floods.

Similar tiny house communities have been built in Manitoba, Ontario, New Brunswick and elsewhere. A limiting factor, says Smith, is land. Funding and arranging the needed services can also be a challenge. Providing the physical home may be the most obvious part of solving homelessness, Smith observes, but there's so much more that goes into a home: "It's about safety, it's about care,"

Canada now faces a choice. The country could decide to become a place where one in five homes is perpetually affordable and where no one is left without a place to live. "What Canada should do," says Whitzman, "is say that we're going to end homelessness. We haven't really said that yet." ✱

"WHAT CANADA SHOULD DO IS SAY THAT WE'RE GOING TO END HOMELESSNESS. WE HAVEN'T REALLY SAID THAT YET"
—CAROLYN WHITZMAN



TURN WASTE INTO WEALTH

by Patchen Barss

Recycling rare-earth elements and critical minerals could make Canada a global leader in sustainable tech

The race for global leadership in sustainable energy is also a race for critical minerals – the essential elements in electric vehicles, renewable power systems and other green technologies. These resources are unevenly distributed across the planet, concentrated in just a handful of countries, and geopolitics often dictates access.

Canada, however, has an advantage. Many of the materials identified in the federal government's 2024 critical minerals strategy (part of a larger climate plan) can be mined domestically. Yet mineral extraction is expensive and environmentally disruptive; resources are finite. As global demand soars, the urgency of reclaiming and recycling critical minerals grows. To lead in sustainable energy, Canada must rely as much on its researchers as its miners.

A recent paper co-authored by Gisele Azimi, a professor of chemical engineering and applied chemistry and a Canada Research Chair in Urban Mining Innovations, predicts that by 2030

an estimated 350 million electric vehicles will produce 10 million tonnes of spent batteries. This represents a massive environmental challenge but also an enormous opportunity – for reclaiming the critical materials contained inside them.

Azimi studies rare earth elements and other materials vital to rechargeable batteries, including lithium, cobalt, nickel and manganese. "When these batteries reach the end of their life, are we simply going to dispose of them, creating massive dumps full of products that are rich in these elements? It doesn't make sense," she says.

Recovering these minerals wouldn't just cut waste but would also support a resilient, made-in-Canada supply of materials the whole world is competing to secure.

SUSTAINABLE SUBSTITUTES

Traditional means of extraction – in both mining and recycling – often rely on hydrometallurgy, which uses acid baths to separate and capture materials. While effective, the process generates large volumes of hazardous waste.

Azimi has developed a promising alternative. By heating and pressurizing carbon dioxide to create "supercritical fluids" – substances with the properties of both liquids and gases – her team can extract metals at least as effectively as acid, but with minimal waste.

The advantages are striking: carbon dioxide is inert, abundant, cheap and easy to recycle. That makes supercritical CO_2 not just cleaner but potentially cheaper than conventional recycling methods.

"WHEN THESE BATTERIES REACH THE END OF THEIR LIFE, ARE WE SIMPLY GOING TO DISPOSE OF THEM, CREATING MASSIVE DUMPS FULL OF PRODUCTS THAT ARE RICH IN THESE ELEMENTS? IT DOESN'T MAKE SENSE." –GISELE AZIMI

While Azimi focuses on batteries, Aimy Bazylak works on related technologies such as water electrolyzers (which produce hydrogen fuel), and fuel cells, which create energy by electrochemically combining hydrogen or another hydrogen-rich fuel source with oxygen. Fuel cells can power vehicles or be used in industrial settings, but their components often degrade within as little as five years.

Bazylak, a professor of mechanical engineering who holds a Canada Research Chair in Clean Energy, aims to make these devices more efficient, durable and cost effective – in part by recovering critical materials from spent components. Efficient recycling methods not only make fuel cells more sustainable overall, but also provide cost savings for companies trying to commercialize them.

"We want to make sure that if companies like Hyundai or Ballard come to us, we're giving them information that can advance their technologies that will go to market," she says. "It's my personal philosophy that as academics we want to serve the public. We can make a cleaner society possible now."

In Bazylak's lab, environmental goals converge with economic ones. "If I want to replace all the gasoline engines or diesel engines with fuel-cell engines, I have to make them cheaper," she says. One of the biggest costs comes from the catalyst layer, which requires precious metals. "In fuel cells, there's platinum. In water electrolyzers (the things that produce hydrogen), we also use iridium, which is even more valuable than platinum."

Bazylak and Azimi both acknowledge that mining cannot be eliminated. But they believe it can be made cleaner. "When it comes to sustainability, I think it's important to understand that, yes, we need to get these materials and that involves mining," says Bazylak. "If we can do it more sustainably, then that makes the technology much more responsible."

Fuel cells and electrolyzers also have another layer of complexity: they use polymers known as PFAS (polyfluoroalkyl substances), which are widely used in textiles and food packaging to make them water resistant. Critical mineral recovery often leaves PFAS residues that pollute waterways and

even human bloodstreams. Bazylak hopes to either contain this waste more effectively or remove PFAS from the technology altogether.

Recycling technology that's also non-polluting – from creation through disposal – must be a central part of the strategy. "It's not really fair to say, 'Hey, these are green technologies,' if we don't think of the full life cycle."

By 2030, an estimated 350 million electric vehicles will create 10 million tonnes of spent batteries, a huge challenge – and opportunity – for recycling

Clean-energy devices rely on platinum and iridium, both expensive. Iridium alone costs more than $6,000 CAD an ounce – underscoring the need for recycling.

AN OPENING FOR CANADA

In 2024, Bazylak was part of a team that was awarded $2-million from the Ontario Research Fund for a multi-university project to find alternative methods for reclaiming both metals and polymers. "Our ultimate goal is to produce devices made from recycled material, and produce materials that are easier to recycle and don't have PFAS inside. We're taking a multi-pronged approach to a really sustainable life cycle for these devices," she says.

Bazylak and Azimi see opportunities for their own research, and for Canada to build on its reputation in the field. "Worldwide, Canadians are thought of very much as leaders in clean energy, especially in fuel cells and electrolysis," Bazylak says. "I feel strongly that in Canada, we need to put more funding into research."

Some Canadian companies already use hydrogen in the production of steel and in other industrial applications, but Bazylak says Canada needs to keep improving and adapting the technology and hydrogen infrastructure in order to stay ahead. "We have to buckle down and keep on working. We have the capacity to develop these technologies. We can produce them, and we can also create jobs and sell this technology worldwide."

Azimi, meanwhile, is moving to commercialize her supercritical CO_2 method, though she acknowledges it takes time for industry to adapt. Pressurized vessels for carbon dioxide are widely used for other industrial purposes (including pharmaceutical production and decaffeinating coffee), but they are new to mining and recycling facilities.

Other Canadian ventures are further along. Li-Cycle, co-founded by Ajay Kochhar (BASc 2013) already offers recycling services for EV batteries and consumer electronics. In August 2025, the company was acquired by Glencore, a mining and energy giant with a strong emphasis on recycling.

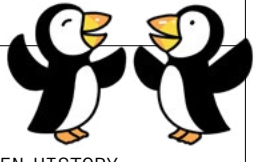
MOMENT TO LEAD

The stakes are high. Companies and countries that lead in building a circular economy – where materials are continually reclaimed and reused – will benefit economically, environmentally and strategically.

"The opportunities are quite large for Canada," Azimi says. "Electric vehicles are still a new technology. The lithium-ion battery in an electric car has about five to 10 years of life. As the number of EVs increases tremendously, this waste will increase. What should we do with it?"

For Azimi, the answer is clear: invest now or risk falling behind. "Canada has a real chance to lead. But if we don't move, those opportunities will pass us by," she says.

Bazylak echoes the concern. "This could be a tremendous success story for Canada. But without investing in homegrown technologies, people will simply buy from elsewhere," she says. "We need stronger support for research – because the capacity to lead is already here."



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Teaching in the age of AI

As machine learning reshapes higher education, U of T is preparing students to become "super humans"

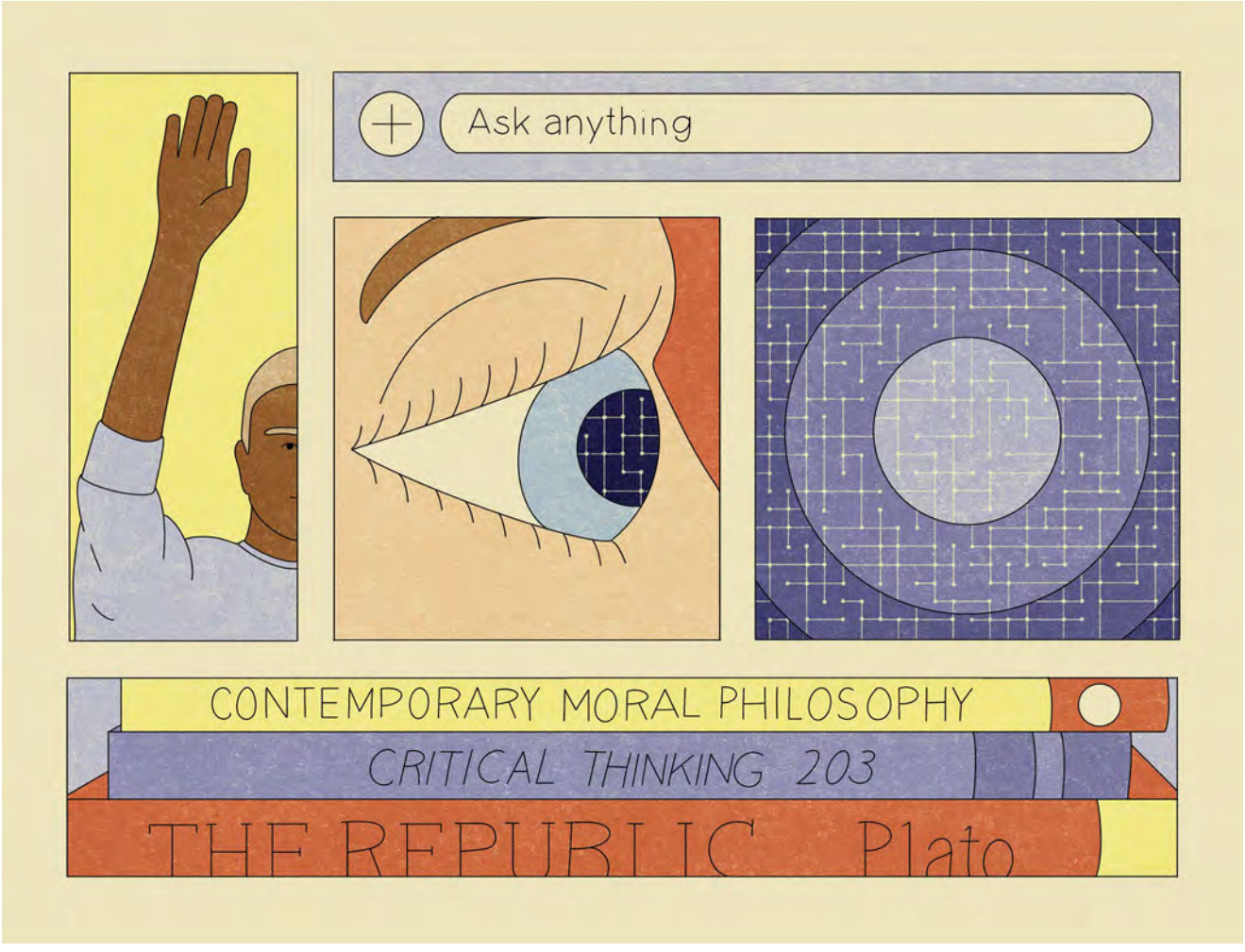


ILLUSTRATION BY MELANIE LAMBRICK

This fall, Kyle Smith, a professor in the history of religions program, will ask his students at U of T Mississauga to take a side in the so-called Christmas culture wars. Part of an assignment for his third-year course "Christmas: A History," it requires students to choose a "war zone" (for example, "Merry Christmas" versus "Happy Holidays" or real versus artificial trees), create a propaganda campaign with a recruitment poster and victory merchandise, and draft a "peace treaty" to win the ideological war.

What makes the assignment – and others he'll be giving his class – unique is that students will use generative artificial intelligence for almost every task, including gathering intel on the opposing side's tactics, crafting persuasive messaging and documenting how the technology produces false or prejudiced information to support

their cause. Smith says this exercise can help students understand how AI generates results and avoid being misled by them. "In our AI world, every algorithm has a particular agenda and there is no objectivity. For students to recognize propaganda, they have to know how it's created," he says.

Smith's assignment is one example of how U of T is adapting to AI's rapid reshaping of teaching and learning. Students can use AI to conduct research, summarize concepts, create personalized study aids and produce original text, images, audio, video and computer code. Meanwhile instructors can use the technology to brainstorm lessons, create presentations and quizzes and provide feedback on assignments.

To understand the opportunities and risks, the university established an AI task force in spring 2024 consisting of six working groups. Their findings and recommendations are encompassed in the June 2025 report, *Toward an AI-Ready University*.

The Teaching and Learning Working Group, composed of 11 professors and administrators from across the university, made several recommendations, including: redesigning assessments to emphasize human critical thinking; developing all community members' ability to use common AI tools and critically evaluate their outputs; creating standards for AI tutoring systems; and sharing effective practices for using AI as a teaching tool.

"We looked at the whole 360-degree process of conceiving and delivering a course – both how we teach and what we teach," says group co-chair Susan McCahan, associate vice-president and vice-provost, digital strategies. "We considered the kind of literacy students will need going forward, how you might go about designing a syllabus, assessment planning, and using AI for grading and feedback."

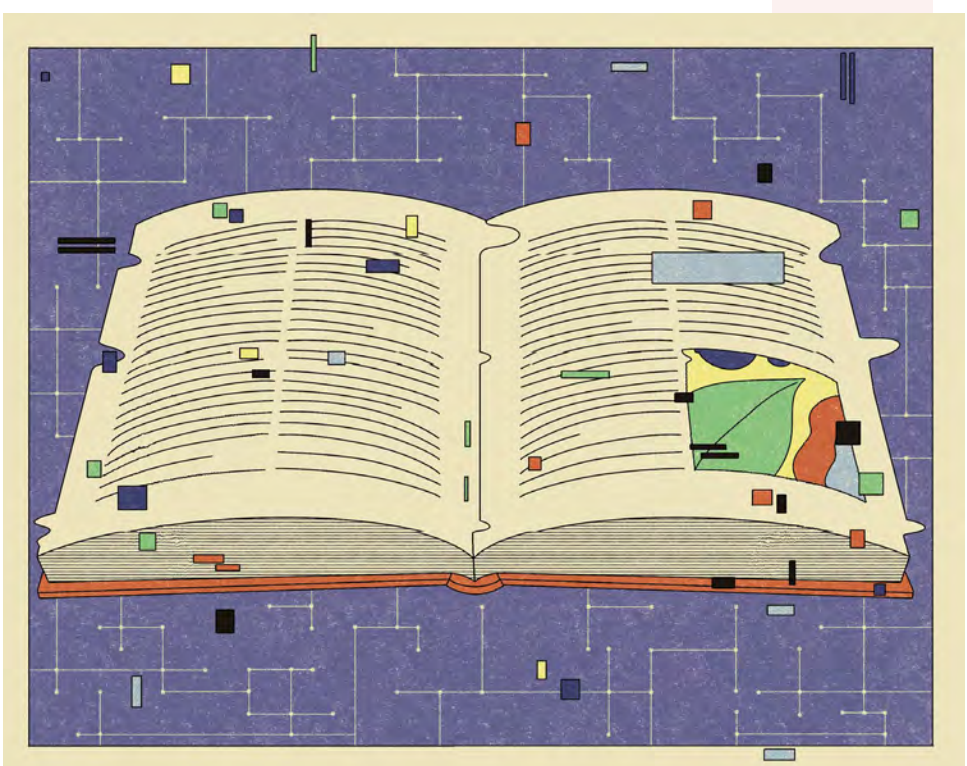
AI's ability to produce coherent, polished copy about complex topics that is often – but not always – accurately sourced can challenge instructors in assessing the extent to which students understand course concepts. McCahan has observed that, in response, some professors are assigning fewer take-home writing assignments (to avert the risk of AI-generated work) and instead are emphasizing in-class writing tasks, presentations and group work, where it's possible to limit AI use. They're also allocating more marks to these projects.

"IN OUR AI WORLD, EVERY ALGORITHM HAS A PARTICULAR AGENDA, AND THERE IS NO OBJECTIVITY"

The working group also determined that courses should promote students' AI literacy within their specific discipline and their ability to detect algorithmic biases in AI outputs, which can omit or stereotype women, racialized people and other minorities. By 2030, the report envisions learning activities where students use both human- and AI-generated content to build their knowledge, interact with AI avatars in group work and critique results produced by an AI.

This last activity is already happening at U of T Scarborough, says Karen McCrindle, associate dean of teaching and learning and the director of the Centre for Teaching and Learning. She recalls a professor assigning students to evaluate the merits of an AI-generated answer about a course topic, grade it and reflect on how they might respond differently.

"The professor's idea is, let's see together what we can learn from this tool, what its capabilities are and have a conversation about what it



ILLUSTRATIONS BY (LEFT) MELANIE LAMBRICK; (RIGHT) DAVID SPARSHOTT

can and can't do," says McCrindle, who also sat on the working group.

McCrindle and McCahan both note that how AI is integrated into courses will differ by discipline, and affirm that the institution entrusts professors to apply it as they see fit. They encourage faculty members to experiment with the technology and to take advantage of the university's extensive AI training resources.

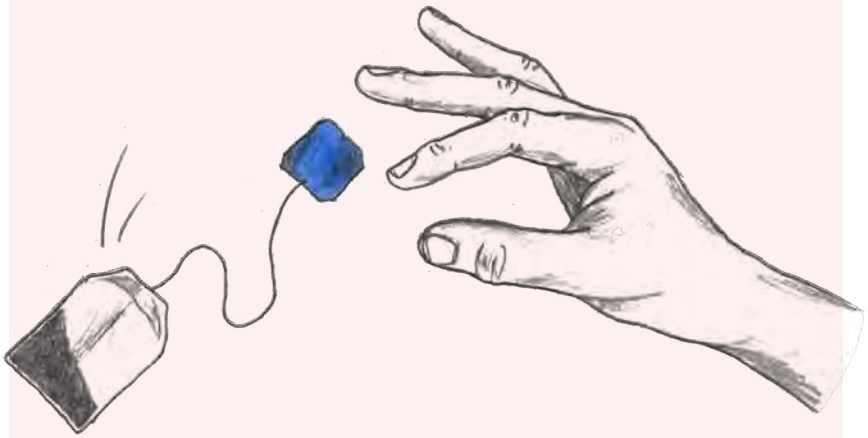
"Not all faculty are using AI or are comfortable using it. Change isn't easy for any of us," says McCrindle. But she adds that instructors should become familiar with it so they can "set the ground rules in the classroom for which uses are okay and which aren't."

Toward An AI-Ready University also emphasizes the need to build students' capacity to use AI in ways that advance their own learning. For example, McCahan says, using an AI chatbot to explain a course concept in a way that a 10-year-old would understand it is "deskilling," as it does not support university-level learning. By contrast, using a query that elicits a more nuanced response is "upskilling," because it makes you "mentally struggle" and elevates your comprehension.

For McCahan, the growing prominence of AI in higher education underscores the role of our distinctly human qualities in meaningful learning. She sees a need to encourage students to lean into their critical thinking skills, creativity, ethical judgment, emotional depth, relationship skills and life experiences – elements AI may emulate but cannot authentically replace – to stimulate their intellectual and personal growth.

"We have to help students understand that. We should not underestimate the value of our perspective as humans," she says. "The more AI makes us superhuman, the more we need to be 'super humans.'" **—Sharon Aschaiek**

A RECOMMENDATION



How to avoid ingesting plastic

New research has revealed something unsettling: microplastics — tiny particles shed from the plastic we use every day — are showing up in human brains, as well as in most other organs. This is worrisome, says Dr. Brandon Luu, because it shows that microplastics can cross the blood-brain barrier, possibly even raising the risk of dementia and other diseases. So, what can we do to reduce our exposure? Luu, who recently completed his internal medicine residency at U of T, offers a few practical steps. **—Scott Anderson**

Ditch plastic water bottles, tea bags and ultra-processed foods. Bottled water is one of the biggest sources of microplastic ingestion — both from single-use bottles and the reusable plastic ones that people often tote to the gym. Luu recommends switching to metal or glass bottles. He also advises forgoing plastic tea bags, which release particles when heated, and opting for loose tea leaves with a metal infuser. There are many health reasons to avoid highly processed foods, he adds, including a greater risk of ingesting microplastics due to how they're processed and sealed.

Never microwave food in plastic containers. Even "microwave-safe" only guarantees that the container won't warp or melt — not that it won't shed a lot of tiny plastic particles into your meal.

Help your body eliminate plastic. Completely avoiding microplastics is impossible. The evidence around how to rid them from your body is evolving, but sweating — through exercise or saunas — may help. Adding fibre to your diet might help reduce absorption — by binding together microplastics in the gut, allowing them to be excreted before they enter the bloodstream. "More research is needed," says Luu. "But in the meantime these changes could significantly lower your exposure — and that's a good start."

Bringing Black history to light

Professor Afua Cooper is leading an effort to share the untold stories and achievements of African Canadians

In the early 1800s, Head of the Lake was a growing Black community in Ontario where people built homes, ran businesses and worshipped together. Located on the western end of Lake Ontario, on what became the city of Hamilton, this vibrant society was established by both free and formerly enslaved Black men and women from the U.S. who purchased land to forge a new life.

These early Black Hamiltonians also fought for justice and equality. They railed against the extradition of an escaped slave to his former master in Kentucky and fought for their children's right to attend public schools, overcoming the prejudiced objections of local white people. These and other efforts to resist racial discrimination helped transform Hamilton into a hotbed of anti-slavery activity.

This chapter of Canadian history is not, however, part of the curricula at most Canadian public schools, which is precisely why it's included in *A Black People's History of Canada*. The website is a new public education resource led by U of T Scarborough professor Afua Cooper, a Black Canadian studies expert who wants to ensure that current and future generations of schoolchildren in Canada better understand how Black people have experienced and shaped this country.

"Despite the many ways Black people have influenced Canada – economically, politically, through abolitionist struggles, the civil rights movement and beyond – these histories have been studied very little," says Cooper, who

PHOTOGRAPHS BY O'SHANE HOWARD

U of T Scarborough professor Afua Cooper at Osgoode Hall, site of the landmark 1861 John Anderson fugitive slave extradition case

←

teaches in the history and women's and gender studies programs at U of T Scarborough.

In 2021, as Killam Research Chair at Dalhousie University, she was awarded just over $1 million from the Canada History Fund to create classroom-ready learning materials for teachers across the country. She recruited a team of researchers to gather information on the key figures, organizations, movements and contributions that comprise 400 years of Black Canadian history. They are turning their findings into articles, lesson plans, presentations and videos that will be integrated into English- and French-language Black history curricula in most provinces and territories.

The site already covers topics such as the first all-Black battalion that fought in the First World War; Portia White, Canada's first Black opera singer; the many Black entrepreneurs who thrived as barbers across Canada; and how class and race have impacted the lives of African-Canadian children. New materials are being added regularly, covering the experiences of Black Canadians in abolitionism, science, technology, business, the civil rights movement and other vital domains.

For Cooper, growing up in Jamaica near a former slave plantation and hearing her grandmother's stories about Black rights activism in that country ignited her social conscience and her passion for history. As a teenager, she discovered historian Walter Rodney's 1972 book *How Europe Underdeveloped Africa* and says learning about the devastating

“THE MORE WE LEARN ABOUT EACH OTHER, THE MORE WE CAN APPRECIATE EACH OTHER”

↑ “Education can change the world. That’s why this work is urgent.”

effects of colonialism “changed my life” and inspired her to become a historian.

Cooper moved to Canada in 1980 to join an older sister, and soon enrolled at U of T, graduating with a BA in African Studies in 1986. Later, she earned master’s and doctoral degrees from the university. Her dissertation focused on abolitionist Henry Bibb, a runaway slave who founded *Voice of the Fugitive*, Canada’s first Black-led newspaper.

She went on to teach women’s history and Black history at Simon Fraser University, where she founded the Black Canadian Studies Association and later, at Dalhousie University, established a Black Studies program. She took on her current role at U of T Scarborough in 2024.

Alongside her academic pursuits, Cooper nurtured her love of poetry: in 2003, she co-founded Dub Poets Collective, whose members performed internationally, and, in 2018, was named Halifax’s poet laureate. A few years later, she founded a consulting firm devoted to ending racism globally. Working with companies, school boards and non-profits around the world, she helps organizations improve racial justice in the workplace and confront the legacies of slavery.

Cooper says the more she learned, taught and wrote about Black history in Canada, the more she observed the gaps in studies and published works. Then, when her three children attended public school, she noticed that the historical experiences and achievements of African Canadians were almost nowhere to be found in their textbooks or assignments. She remembers her daughter in Grade 3 having to write about Canada’s pioneers, and none of them were Black.

“Imagine my daughter, and others like her, going through the education system for 12 years and almost never seeing themselves reflected in the curricula,” Cooper says. “It makes you feel like you don’t belong. That’s a great harm.”

THREE BLACK CANADIANS YOU NEED TO KNOW

A Black People’s History of Canada will introduce more young people to African Canadians who helped shape the nation

Opera singer **Portia White**, one of Canada’s greatest 20th-century vocalists, was born in 1911 in Nova Scotia. Barred from many performance venues due to racial segregation, she persevered with the help of a community trust and enjoyed success on stages worldwide – even singing for Queen Elizabeth II in 1964.

Among the first to legally challenge anti-Black racism in Canada was **Lulu Anderson**. In 1922, she was denied entry to a play at Edmonton’s Metropolitan Theatre because of her race. Though she lost the lawsuit she filed, the case became a landmark in Canada’s civil rights history.

Having escaped enslavement in Kentucky in 1841 and settled in southwestern Ontario, **Henry Bibb** published *The Voice of the Fugitive*, a newspaper that championed civil rights. He founded the Anti-Slavery Society of Canada and chaired the 1851 Convention of Coloured Freemen, a historic Toronto gathering of prominent abolitionists.

A Black People's History of Canada is her response – an "intervention," as she calls it, to mitigate this harm by empowering educators with the full picture of Black life in Canada. Cooper and her colleagues are also working with ministries of education and school boards across the country to have their materials approved for use by elementary and secondary school teachers. They have also held a conference, panel discussion and other events to promote the project, and Cooper has led workshops for teachers in Nova Scotia.

"Many of the teachers are either delighted or upset because they have never heard this history. They're saying, 'I'm an educated person – how come I didn't know this?'" Cooper says.

The initiative continues to grow. Cooper is developing a Parks Canada-funded film series on distinguished Black Canadians, beginning with Marie-Joseph dite Angélique, a Portuguese-born enslaved woman who rebelled against her indentured servitude in what is now Old Montreal.

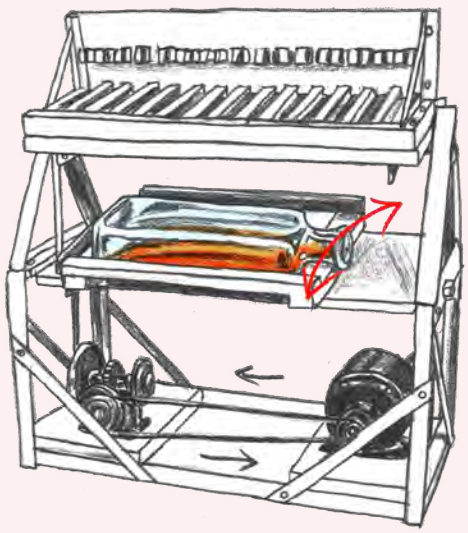
Cooper sees this work as urgent. She is concerned about declining funding for the humanities, which she believes inhibits research on Black history. She is also troubled by the recent crackdown on diversity, equity and inclusion offices at U.S. universities, a trend she says is already underway in Canadian companies and school boards.

Cooper says she is weary of how misused power can divide us and set back social progress, but she sees herself as an optimist, and she understands that education can change the world.

"We are not a colour blind society. We are not a society that's based on equality," she says. "So, the more we learn about each other, the more we can appreciate each other, and then we can say, I'm not going to discriminate against someone; it doesn't make sense." **—Sharon Aschaiek**

SPOT ILLUSTRATION BY DAVID SPARSHOTT

AN ORIGIN



Dr. Leone Farrell's bottle-rocking machine ←

The woman who helped stop polio

Dr. Leone Farrell's groundbreaking work at U of T made mass vaccination possible — and saved countless lives

In the early 1950s, Canada faced an alarming polio epidemic that afflicted thousands of children. In an especially bad year, several hundred Canadians died of the highly infectious disease.

A breakthrough came in 1953 when Dr. Jonas Salk at the University of Pittsburgh successfully tested the first safe and effective polio vaccine. But mass-producing the polio virus needed for the vaccine was slow and laborious — the virus had to be grown in infected monkey kidney cells.

Salk turned to the University of Toronto's Connaught Medical Research Laboratories, a global leader in drug and vaccine production, for help. When it came time to make enough vaccine for a field trial, he sought the expertise of Dr. Leone Farrell (PhD 1933), a biochemist, microbiologist and skilled innovator who had already revolutionized vaccine production with her "rocking method." This technique vastly improved the yield of the starting material for vaccines.

Farrell adapted her method to grow monkey cells more efficiently, making large-scale production of the polio vaccine possible. The challenge was enormous. This "Herculean task," as Salk described it, required Farrell to oversee the installation of many custom-built "bottle-rocking machines," to hire and train staff, and to ensure that the delicate — and potentially dangerous — process went smoothly.

Though no lab workers contracted polio, Farrell later wrote that "everyone thought at least once that they had."

Her approach — later called the "Toronto Method" — allowed Connaught Labs to produce 2.3 million vaccine doses for Canadian use by 1956, a crucial step toward eliminating polio in North America. Canada was officially certified polio-free in 1994.

The Smithsonian Institution in Washington, D.C., considered Farrell's invention so important that it included a prototype reconstruction of her bottle-rocking machine in a polio exhibit that opened in 1958.

—Neil Macpherson

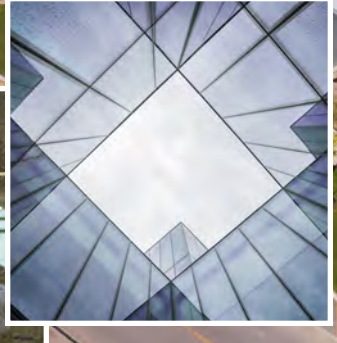
UTM's New Science Building is a model of sustainability

"It's not often you have to weed *inside* a building," says Rob Eidukaitis, senior manager of grounds and property management at U of T Mississauga. "But it's all part of a new way of thinking about sustainability."

This approach is on full display at UTM's New Science Building, which opened last fall. With four storeys of state-of-the-art lab space spanning 90,000 square feet, the facility is designed not just for research but also as a model for how universities can shrink their environmental footprint.

The building's green features extend from top to bottom – from a rooftop solar array to a rainwater storage tank underground. Together, they make the New Science Building one of the most energy-efficient biological and chemical labs in North America.

The facility consumes 65 per cent less energy than a typical research building and has earned Silver certification from Leadership in Energy and Environmental Design (LEED). As part of its green commitment, U of T Mississauga plans to design all new buildings to a minimum LEED Gold standard – a key step toward cutting campus carbon emissions 37 per cent by 2030 compared to 2005. **—Kate Martin**



PHOTOGRAPHS BY NICK IWANYSHYN

BUILT FOR THE FUTURE

UTM's New Science Building blends cutting-edge labs with green design to save energy and water, and reduce CO_2 emissions

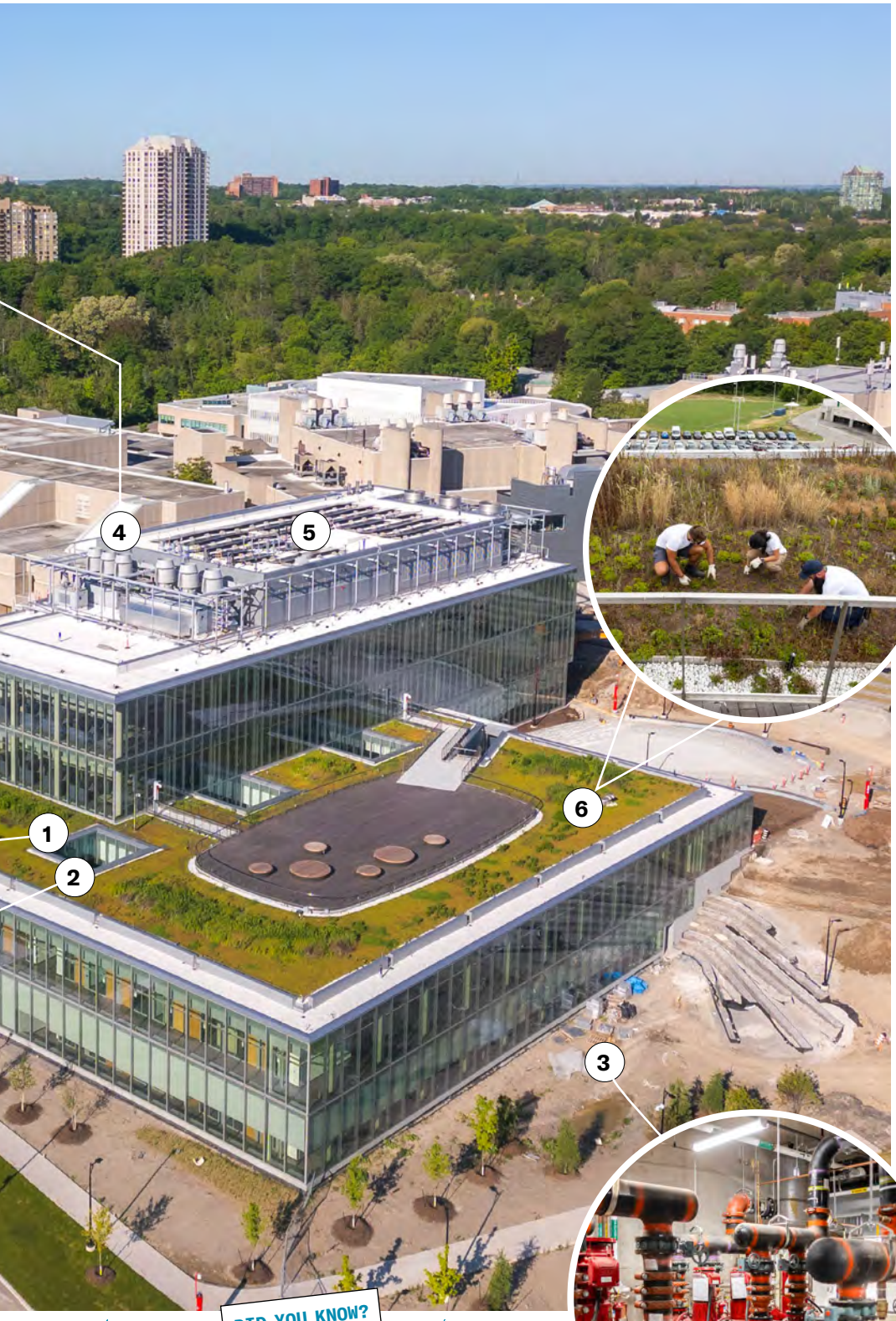
Gardens **(1)** sit inside at the base of glass columns stretching from lobby to roof **(2)**. These open-top light wells bring natural illumination into labs and collaboration spaces, reducing the need for electric lighting.

For heating and cooling, the building draws from a geothermal field **(3)**, installed under the building to curb campus carbon emissions. The field contains pipes filled with fluid that extracts heat from the building in summer and stores it underground, then returns the heat to the building in cooler seasons.

The geothermal field works in tandem with the building's high-efficiency HVAC system, which includes heat-recovery pumps, ultra-low velocity fume hoods and a rooftop exhaust system **(4)** to remove hazardous air from labs with minimal energy and noise. The lab ventilation system runs only when needed to reduce energy consumption.

Rows of solar panels **(5)** line the roof and generate up to 70kW of electricity (enough to power 200 computers or 2,800 light fixtures) to help offset the building's demand.

A green roof **(6)** (UTM's ninth) collects storm water, while native plants help cool the building and its surroundings.



DID YOU KNOW?

In the basement of the New Science Building, a tank the size of a backyard pool collects rainwater. After ultraviolet treatment and filtration, the clean water is reused throughout the building.

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ILLUSTRATION BY GRACIA LAM

The science of 'us'

A strong sense of togetherness helps interracial couples handle unique social stresses, U of T Mississauga researchers find

INTERRACIAL COUPLES OFTEN face unique social pressures – from strangers' stares to family disapproval – and two new studies from U of T Mississauga shed light on how these stresses affect the relationship. One study finds that social disapproval can heighten jealousy in interracial couples, while another shows how the cultural sacrifices partners make to bridge differences in upbringing, values and traditions have both positive and negative consequences. Together, the studies suggest that building a strong, shared identity as a couple can help partners weather challenges and deepen their connection.

Vikki Pham knows these pressures firsthand. In one of her relationships, she faced a lot of external disapproval and found herself feeling unusually threatened by potential romantic rivals – a reaction her own research now helps explain.

"We found that people in interracial relationships report experiencing jealousy more often and more intensely and had bigger worries about possible rivals than people in same-race relationships," says Pham (BSc 2024), the lead author of the study, with psychology professor Emily Impett, the director of the Relationships and Well-Being Laboratory at U of T Mississauga. The study surveyed about 400 participants – mostly heterosexual and married or engaged – from Canada and the United States.

Previous research has shown that people with an "anxious

attachment style" (a characteristic of which is fear of being left by a partner) are more likely to be jealous. So, Pham and her research team assessed individuals' attachment styles to make sure they were taking this into account when assessing experiences of jealousy. This led to a key finding: interracial partners report greater attachment anxiety than same-race partners.

To better understand why, Pham and her team looked at participants' experiences of social disapproval. Not surprisingly, says Pham, social disapproval is more common in interracial partners, and it predicts higher attachment anxiety. "We reasoned that social disapproval primes them to be vigilant of outsiders to the relationship, which may extend toward possible romantic rivals."

One of the important takeaways from Pham's study, according to Impett, is that experiencing more jealousy in an interracial relationship does not necessarily signal a problem between partners. "Rather," she says, "it may reflect the added stress of being in a relationship that's often judged or questioned by others."

The researchers identified a protective factor in interracial relationships that can mitigate the harmful effects of this stress and reduce jealousy. "When people had a strong couple identity – a sense of unity and being a team – it buffered against the impact of jealousy on relationship satisfaction," says Pham.

The lab's second recent study, led by PhD student Hanieh Naeimi, focuses on another stress in interracial partnerships. This research explores "cultural sacrifices" – the negotiations, adjustments and trade-offs people make to manage cultural differences in their intimate lives.

"All relationships require some kind of sacrifice, yet couples from different cultural backgrounds often have to make some compromises related to their cultural identities and upbringings," says Naeimi. Nearly 600 people in intercultural relationships from Canada, the United States and the United Kingdom – mostly female, white and in their 30s – participated in the study.

The participants revealed that cultural sacrifices can lead to challenges and a sense of lost identity, but also to personal growth and stronger relationships. "Several respondents talked about the difficulties of acting as a translator for their partner when their families visited, or feeling left out of conversations at family events," says Naeimi. Others saw language differences as an opportunity to learn something new.

Respondents also said that being exposed to new foods, cultural celebrations and religions could be rewarding, while navigating gender role expectations or managing prejudice from a partner's family could be stressful.

The individuals in the study who found ways to create a sense of togetherness with their partner that honoured both of their cultural backgrounds were more likely to feel connected and satisfied in their relationships. This finding points to one of the studies' key results. "Even though we focused on different kinds of challenges, the takeaway is the same," says Impett. "Building a strong, shared sense of 'we' can help couples navigate the emotional ups and downs that come with being in a relationship that sits outside the cultural mainstream."

Naeimi says this insight has practical applications. "If couples' therapists are aware of the cultural sacrifices people make, they can help partners navigate the relationship complexities. But this research is also about validating intercultural relationships, and showing people they're not alone."

The researchers say there is societal value in this new, more nuanced understanding of cultural sacrifices and the benefits and drawbacks in intercultural relationships. "Cultural sacrifices can lead to the blending of cultures within families, which can create positive change in society," Naeimi says.

Pham agrees, and looking back now on her earlier relationships, wishes she'd had this knowledge. "An 'us against the world' attitude could have helped shield us against the outside forces."

– Megan Easton

ILLUSTRATION BY GRACIA LAM

“Libraries have never been more vital.”

As a newly minted librarian, Liz Sullivan (MI & MMSt ’25) walks in the footsteps of Ruth Corner—a career librarian who left a gift in her will to support Master of Information students at U of T.

The Ruth Corner Public Librarian Fellowship helped Liz pursue her passion for libraries as a vital community resource. Now she’s using her combined master’s degree to ensure libraries remain relevant and accessible. For all.

To set up an estate gift, email Michelle Osborne at michelle.osborne@utoronto.ca, call 416-978-3811 or visit **uoft.me/giftplanning**

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Needed: Three Alumni

The **College of Electors** invites applications from University of Toronto alumni to serve as members of the **Governing Council** – the senior governance body that oversees the academic, business and student affairs of the university.

The College of Electors is seeking candidates with a breadth of professional expertise, diverse viewpoints and a deep commitment to higher education, and who will contribute meaningfully to the principled and effective governance of the university.

There are **three available alumni governor seats** in 2026. The term is for **three years** beginning **July 1, 2026**. Incumbents are eligible to seek re-election.

The **Call for Applications** opens on **Thursday, November 13, 2025**, and closes on **Thursday, December 11, 2025, at 5:00 p.m.**

The **2026 Alumni Governor Application Form and Instruction Guide** will be available as of **November 13, 2025**, at: https://uoft.me/alumni-governors-application

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The Lawson Climate Institute, named for donors Brian and Joannah Lawson (left), will bolster U of T's global leadership in sustainability ←

PHOTOGRAPH BY LISA SAKULENSKY

U of T launches Lawson Climate Institute with $60-million gift

New facility will accelerate technologies, policies and training to help Canada reach net-zero by 2050

The University of Toronto has launched a new institute that will draw on the university's expertise across a wide range of fields to accelerate practical, scalable and equitable solutions for a more sustainable future.

The Lawson Climate Institute will ramp up U of T's capacity to advance the technologies and policies Canada needs to achieve net-zero emissions by 2050. It will also empower students from every field to make climate action a priority, and to focus on achievable gains for both the environment and human well-being.

The institute is named for Brian and Joannah Lawson, alumni and longtime supporters and volunteer leaders with the university, in recognition of their transformative $60-million donation – the largest gift to a Canadian university in support of climate change solutions.

"We are deeply grateful to Brian and Joannah Lawson for this truly visionary act of philanthropy," says U of T President Melanie Woodin. "It is a powerful new source of hope in our efforts to address the climate crisis."

The institute will focus on four areas: developing sustainability technologies; advancing equitable climate policy; establishing the Lawson Scholars program to train future climate change leaders; and expanding the university's Sustainability Pathways program to give every undergraduate student the chance to engage in sustainability learning.

To help attract top talent, the Lawsons' gift will create three endowed Lawson chairs – in policy innovation, sustainable energy and sustainable food systems. These positions will enable U of T to attract world-leading experts who will drive critical research and offer students the opportunity to learn from the best.

"We realized we could make a profound difference with this donation by helping to bring together the wide range of climate research taking place at U of T, enabling the university to achieve even greater impact," said Brian and Joannah Lawson in a statement.

The Lawson Scholars program will provide more than 100 new scholarships annually for students at all levels; the first will be announced in 2026. The Lawsons set up their gift with a matching component to inspire others to support U of T's climate efforts. This initiative has generated $3.1 million from 80 donors to support climate and sustainability awards.

In recognition of the advances in sustainability under former president Meric Gertler, these include the Meric Gertler Climate and Sustainability Awards – for students pursuing sustainability- and climate-related studies. A $4-million endowment has been established for the awards, thanks to gifts from donors in Canada and Hong Kong and matching contributions from the Lawsons and the university. **—Staff**

INVESTING IN TOMORROW

The Lawson Scholars program will provide **100 scholarships** for undergrads through PhD candidates.

A **$4-million endowment** supports the creation of the Meric Gertler Climate and Sustainability Awards.

Canada's cricket captain

Alum Saad Bin Zafar went from street matches in Pakistan to leading Canada to the World Cup

Saad Bin Zafar has always been obsessed with cricket. Growing up in Pakistan, where the sport is a national passion, he began playing with his friends in the streets at age 10. After moving to Toronto at 17, Zafar (BBA 2011 UTSC) joined an amateur club in the city. He spent years competing in unpaid local leagues, but his perseverance paid off. First called up to the Canadian National Cricket Team in 2008, he became a full-time professional player in 2018 and captained Canada to its first-ever appearance in the T20 Cricket World Cup last year.

How did you get into cricket?

Cricket is the number one sport in Pakistan. Like most kids, I started on the streets with "tape ball." You can't use a hard leather ball – it'll break windows or dent cars. Wrapping a tennis ball in electrical tape gives it a similar weight and bounce without the risk of damage.

What was the cricket scene like in Canada when you first arrived?

The leagues were competitive, but there were few opportunities to earn money. After graduating, I chose corporate jobs that allowed flexibility for time off, whether through vacation or unpaid leave, so I could travel for cricket tours with Canada. It wasn't until 2018 that professional leagues and the national team provided enough financial support for me to leave my corporate job and pursue cricket full-time.

Were you able to play during your time at UTSC?

Yes, I played in amateur leagues during my undergrad, joined an indoor tennis ball league in the old gym, and participated in intramurals. I played on a select U of T team that competed in university tournaments. I still keep in touch with many of the players from that time.

What is the most challenging aspect of playing cricket?

Cricket demands athleticism and technical skill, but the hardest parts are consistency and mental toughness. You can have a brilliant match one day and struggle the next. Keeping a steady form, whether batting or bowling, is incredibly difficult. At the top level, being able to bounce back after a poor performance is the real test.

What will help cricket grow in Canada?

We need more cricket grounds and stadiums that meet international standards. Brampton's year-round facility is a good start. Better infrastructure, coaching and mentorship will attract young players. The passion is there – we just need the support to unlock its full potential. **– Don Campbell**

←

Your cricket hero? Wasim Akram
How would teammates describe you? Mr. Dependable
Favourite non-cricket sport? Badminton

PHOTOGRAPH BY DUANE COLE

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